

APPENDIX A

Directions to Carlisle Town Hall, 66 Westford Street, Carlisle, Massachusetts

The Town of Carlisle is surrounded by Acton, Bedford, Billerica, Chelmsford, Concord and Westford. It is accessible by Route I-95/128 (Exit 31B Route 225/4 to Bedford and Carlisle) and also from Route I-495.

Town Hall is at 66 Westford Street, Route 225, and is a yellow building on a hill, adjacent to the Fire Station. It is a short distance from the intersection of Concord and Lowell Streets.

APPENDIX B

2014	Massachusetts Area Planning Council Carlisle Profile
2010	United States Census Data for the Town of Carlisle
2008-2012	American Community Survey Data for the Town of Carlisle



A partnership between the Metropolitan Area Planning Council & the Boston Indicators Project at the Boston Foundation

Carlisle Community Snapshot

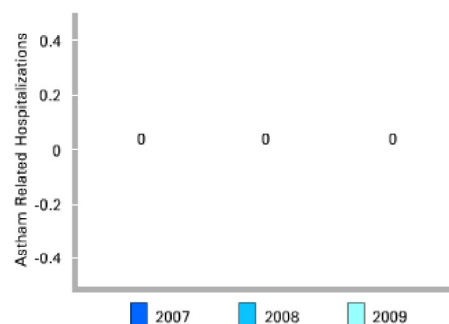
Carlisle is categorized by MAPC as a Country Suburb. These communities have very low housing density, with no significant mixed-use town center and no compact neighborhoods. They have large amounts of vacant developable land, and new growth largely takes the form of conventional low-density subdivisions developed on vacant land, or auto-oriented office and industrial parks. They are generally growing rapidly in percentage terms.



Public Health

Asthma Related Hospitalizations

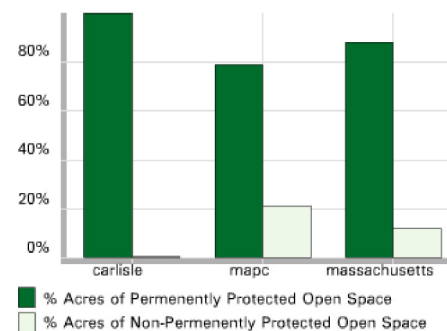
Year(s): 2007-09 • Source: MA DPH



Environment & Energy

Available Open Space

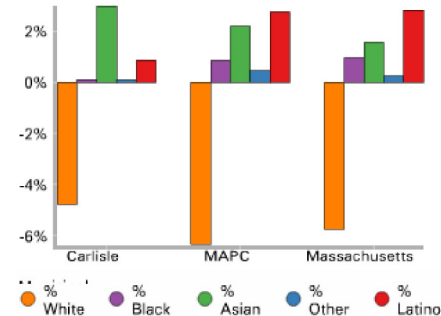
Year(s): 2012 • Source: MassGIS



Demographics

Change in Racial/Ethnic Share

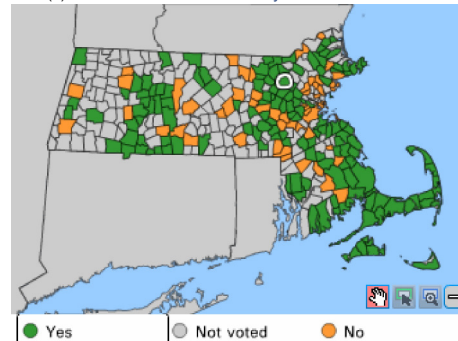
Year(s): 2000,2010 • Source: Census



Civic Vitality & Governance

Community Preservation Act Votes

Year(s): 2011 • Source: Community Preservation Coalition

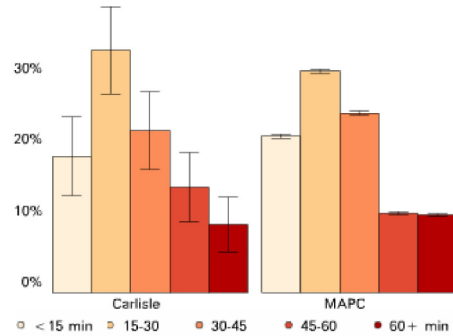


Transportation

Education

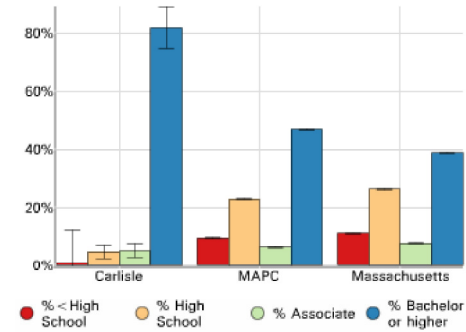
Commute Time to Work

Year(s): 5yr Avg 2007-11 • Source: ACS



Educational Attainment, 25+ years

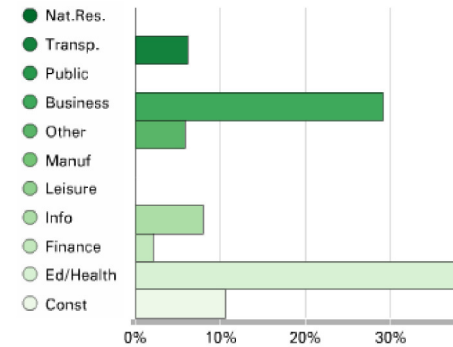
Year(s): 5yr Avg 2007-11 • Source: ACS



Economy

Employment by Sectors

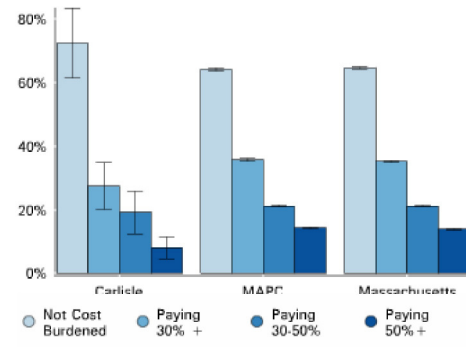
Year(s): 2010 • Source: MA EOLWD ES-202



Housing

Owners Housing Cost Burden

Year(s): 5yr Avg 2007-11 • Source: ACS



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**Comparison, Carlisle Housing Data, 2000 U.S. Census with 2010 US Census and the 2005-2009
American Community Survey**

November 8, 2011

Description	2000 US Census	American Community Survey 2005-2009
Housing Stock		
Total Housing Units	1,655	1740 (Note 3)
Owner-Occupied units	1,518	1,458
Renter-Occupied units		
One unit attached	20	13
Two units attached	38	10
Three or four units	12	23
Five to 9 units	6	0
Renter-Occupied units Total (Note 1)	100	139
Average household size, owner- occupied unit	2.96	3.08
Average household size, renter-occupied unit	2.30	2.30
Rent as % of income (number of households)		
<15 to 19.9%	42	22
20 to 24.9%	5	11
25 to 29.9%	0	21
30 to 34.9%	19	13
35% or more	7	72
No data	17	N/A
Homeowners with mortgage	918	1,077
Housing mortgage cost as percentage of income		
Less than 20%	672	451
20 to 30%	296	283
30 to 34.5%	66	122
35% or more	252	221
Housing units without mortgage	374	381
Median of selected monthly owner costs		
With a mortgage	\$2,570	\$3,511
Without a mortgage	\$710	\$1,000+
Income		
Median adjusted income	\$129,811	\$160,903
Per capita income	\$59,559	\$66,277
Households with incomes \$200,000 or more	388	638
Households below poverty level, all (Note 2)	1.5%	1.7%
Residents 65 years and older below the poverty level (Note 2)	0%	8.4%
Mean household income (dollars)	\$146,819	\$198,100
Income – Total Households (Note 4)	1628	1597
Less than \$10,000	29	11
\$10,000 to \$14,999	36	21
\$15,000 to \$24,999	105	69
\$25,000 to \$34,999	67	0

Comparison, Carlisle Housing Data, 2000 U.S. Census with 2010 US Census and the 2005-2009**American Community Survey****November 8, 2011**

\$35,000 to \$49,999	75	48
\$50,000 to \$74,999	158	126
\$75,000 to \$99,999	148	154
\$100,000 to \$149,999	314	301
\$150,000 to \$199,999	292	229
\$200,000 or more	404	638
Number of 2005-2009 ACS Households earning \$49,999 or less (Note 5)		149 (9.3%)

Note 1: Rental units reported in Census data do not add to totals.

Note 2: Poverty level defined as per capita income under \$10,890 (2011).

Note 3: This figure is from the 2010 US Census.

Note 4: The 2000 US Census Figure is from 1999.

Note 5: The 2010 Housing and Urban Development (HUD) Area Median "Low Income" figure for a family of two in Carlisle was \$ 36,750. The HUD "Low Income figure" for a family of four it was \$64,400.



ARIZONA

NEW MEXICO

OKLAHOMA

ARKANSAS

TENNESSEE

NORTH CAROLINA

SOUTH CAROLINA

DP03

SELECTED ECONOMIC CHARACTERISTICS

2008-2012 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Carlisle town, Middlesex County, Massachusetts			
	Estimate	Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	3,906	+/-148	3,906	(X)
In labor force	2,579	+/-224	66.0%	+/-4.8
Civilian labor force	2,579	+/-224	66.0%	+/-4.8
Employed	2,420	+/-231	62.0%	+/-5.0
Unemployed	159	+/-62	4.1%	+/-1.6
Armed Forces	0	+/-12	0.0%	+/-0.9
Not in labor force	1,327	+/-190	34.0%	+/-4.8
Civilian labor force	2,579	+/-224	2,579	(X)
Percent Unemployed	(X)	(X)	6.2%	+/-2.4
Females 16 years and over	1,996	+/-108	1,996	(X)
In labor force	1,151	+/-152	57.7%	+/-6.4
Civilian labor force	1,151	+/-152	57.7%	+/-6.4
Employed	1,090	+/-150	54.6%	+/-6.4
Own children under 6 years	168	+/-62	168	(X)
All parents in family in labor force	69	+/-45	41.1%	+/-22.4
Own children 6 to 17 years	965	+/-143	965	(X)
All parents in family in labor force	527	+/-125	54.6%	+/-9.6
COMMUTING TO WORK				
Workers 16 years and over	2,407	+/-232	2,407	(X)
Car, truck, or van -- drove alone	1,802	+/-197	74.9%	+/-6.2
Car, truck, or van -- carpooled	157	+/-84	6.5%	+/-3.4
Public transportation (excluding taxicab)	58	+/-37	2.4%	+/-1.5
Walked	16	+/-18	0.7%	+/-0.7
Other means	20	+/-32	0.8%	+/-1.3
Worked at home	354	+/-154	14.7%	+/-5.9
Mean travel time to work (minutes)	30.1	+/-2.2	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	2,420	+/-231	2,420	(X)

Subject	Carlisle town, Middlesex County, Massachusetts			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Management, business, science, and arts occupations	1,659	+/-234	68.6%	+/-5.4
Service occupations	187	+/-67	7.7%	+/-2.7
Sales and office occupations	321	+/-95	13.3%	+/-4.0
Natural resources, construction, and maintenance occupations	99	+/-51	4.1%	+/-2.1
Production, transportation, and material moving occupations	154	+/-61	6.4%	+/-2.5
INDUSTRY				
Civilian employed population 16 years and over	2,420	+/-231	2,420	(X)
Agriculture, forestry, fishing and hunting, and mining	15	+/-16	0.6%	+/-0.7
Construction	150	+/-70	6.2%	+/-2.8
Manufacturing	498	+/-115	20.6%	+/-4.6
Wholesale trade	8	+/-12	0.3%	+/-0.5
Retail trade	136	+/-61	5.6%	+/-2.5
Transportation and warehousing, and utilities	39	+/-26	1.6%	+/-1.1
Information	92	+/-56	3.8%	+/-2.3
Finance and insurance, and real estate and rental and leasing	191	+/-85	7.9%	+/-3.3
Professional, scientific, and management, and administrative and waste management services	608	+/-148	25.1%	+/-6.0
Educational services, and health care and social assistance	460	+/-129	19.0%	+/-4.6
Arts, entertainment, and recreation, and accommodation and food services	128	+/-63	5.3%	+/-2.6
Other services, except public administration	62	+/-37	2.6%	+/-1.5
Public administration	33	+/-30	1.4%	+/-1.2
CLASS OF WORKER				
Civilian employed population 16 years and over	2,420	+/-231	2,420	(X)
Private wage and salary workers	1,816	+/-199	75.0%	+/-5.7
Government workers	245	+/-89	10.1%	+/-3.2
Self-employed in own not incorporated business workers	359	+/-121	14.8%	+/-4.7
Unpaid family workers	0	+/-12	0.0%	+/-1.4
INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)				
Total households	1,796	+/-87	1,796	(X)
Less than \$10,000	58	+/-52	3.2%	+/-2.9
\$10,000 to \$14,999	80	+/-39	4.5%	+/-2.1
\$15,000 to \$24,999	18	+/-20	1.0%	+/-1.1
\$25,000 to \$34,999	28	+/-32	1.6%	+/-1.7
\$35,000 to \$49,999	53	+/-35	3.0%	+/-1.9
\$50,000 to \$74,999	105	+/-59	5.8%	+/-3.2
\$75,000 to \$99,999	182	+/-65	10.1%	+/-3.5
\$100,000 to \$149,999	314	+/-88	17.5%	+/-4.9
\$150,000 to \$199,999	266	+/-76	14.8%	+/-4.2
\$200,000 or more	692	+/-96	38.5%	+/-5.2
Median household income (dollars)	160,000	+/-16,657	(X)	(X)
Mean household income (dollars)	205,298	+/-19,698	(X)	(X)
With earnings	1,512	+/-113	84.2%	+/-4.9
Mean earnings (dollars)	190,573	+/-18,739	(X)	(X)
With Social Security	459	+/-96	25.6%	+/-5.4
Mean Social Security income (dollars)	19,496	+/-2,508	(X)	(X)
With retirement income	332	+/-78	18.5%	+/-4.4
Mean retirement income (dollars)	46,304	+/-11,641	(X)	(X)
With Supplemental Security Income	12	+/-19	0.7%	+/-1.0
Mean Supplemental Security Income (dollars)	6,867	+/-16	(X)	(X)
With cash public assistance income	11	+/-17	0.6%	+/-1.0

Subject	Carlisle town, Middlesex County, Massachusetts			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Mean cash public assistance income (dollars)	3,327	+/-12	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	24	+/-27	1.3%	+/-1.5
Families	1,512	+/-90	1,512	(X)
Less than \$10,000	38	+/-47	2.5%	+/-3.1
\$10,000 to \$14,999	24	+/-26	1.6%	+/-1.7
\$15,000 to \$24,999	18	+/-20	1.2%	+/-1.3
\$25,000 to \$34,999	0	+/-12	0.0%	+/-2.3
\$35,000 to \$49,999	42	+/-30	2.8%	+/-2.0
\$50,000 to \$74,999	84	+/-52	5.6%	+/-3.4
\$75,000 to \$99,999	152	+/-62	10.1%	+/-4.0
\$100,000 to \$149,999	241	+/-77	15.9%	+/-4.9
\$150,000 to \$199,999	264	+/-75	17.5%	+/-5.0
\$200,000 or more	649	+/-94	42.9%	+/-6.0
Median family income (dollars)	176,310	+/-21,200	(X)	(X)
Mean family income (dollars)	223,086	+/-21,508	(X)	(X)
Per capita income (dollars)	75,856	+/-7,368	(X)	(X)
Nonfamily households	284	+/-84	284	(X)
Median nonfamily income (dollars)	78,750	+/-51,021	(X)	(X)
Mean nonfamily income (dollars)	106,905	+/-36,642	(X)	(X)
Median earnings for workers (dollars)	75,714	+/-13,371	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	133,333	+/-13,528	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	86,020	+/-11,683	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	4,870	+/-18	4,870	(X)
With health insurance coverage	4,737	+/-91	97.3%	+/-1.8
With private health insurance	4,527	+/-145	93.0%	+/-2.9
With public coverage	822	+/-169	16.9%	+/-3.5
No health insurance coverage	133	+/-90	2.7%	+/-1.8
Civilian noninstitutionalized population under 18 years	1,133	+/-156	1,133	(X)
No health insurance coverage	18	+/-28	1.6%	+/-2.4
Civilian noninstitutionalized population 18 to 64 years	3,060	+/-203	3,060	(X)
In labor force:	2,363	+/-223	2,363	(X)
Employed:	2,204	+/-227	2,204	(X)
With health insurance coverage	2,166	+/-238	98.3%	+/-1.6
With private health insurance	2,129	+/-240	96.6%	+/-2.3
With public coverage	78	+/-50	3.5%	+/-2.3
No health insurance coverage	38	+/-33	1.7%	+/-1.6
Unemployed:	159	+/-62	159	(X)
With health insurance coverage	118	+/-50	74.2%	+/-20.8
With private health insurance	118	+/-50	74.2%	+/-20.8
With public coverage	0	+/-12	0.0%	+/-19.6
No health insurance coverage	41	+/-40	25.8%	+/-20.8
Not in labor force:	697	+/-132	697	(X)
With health insurance coverage	661	+/-127	94.8%	+/-4.5
With private health insurance	617	+/-128	88.5%	+/-9.4
With public coverage	81	+/-60	11.6%	+/-8.4
No health insurance coverage	36	+/-33	5.2%	+/-4.5

Subject	Carlisle town, Middlesex County, Massachusetts			
	Estimate	Margin of Error	Percent	Percent Margin of Error
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	4.6%	+/-3.7
With related children under 18 years	(X)	(X)	8.7%	+/-7.6
With related children under 5 years only	(X)	(X)	0.0%	+/-56.2
Married couple families	(X)	(X)	3.5%	+/-3.6
With related children under 18 years	(X)	(X)	6.1%	+/-7.6
With related children under 5 years only	(X)	(X)	0.0%	+/-56.2
Families with female householder, no husband present	(X)	(X)	38.8%	+/-42.8
With related children under 18 years	(X)	(X)	67.9%	+/-50.5
With related children under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	6.0%	+/-3.7
Under 18 years	(X)	(X)	6.5%	+/-5.4
Related children under 18 years	(X)	(X)	6.5%	+/-5.4
Related children under 5 years	(X)	(X)	0.0%	+/-27.7
Related children 5 to 17 years	(X)	(X)	7.2%	+/-5.9
18 years and over	(X)	(X)	5.9%	+/-3.5
18 to 64 years	(X)	(X)	5.9%	+/-3.8
65 years and over	(X)	(X)	5.5%	+/-4.7
People in families	(X)	(X)	5.0%	+/-3.9
Unrelated individuals 15 years and over	(X)	(X)	17.4%	+/-11.3

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

There were changes in the edit between 2009 and 2010 regarding Supplemental Security Income (SSI) and Social Security. The changes in the edit loosened restrictions on disability requirements for receipt of SSI resulting in an increase in the total number of SSI recipients in the American Community Survey. The changes also loosened restrictions on possible reported monthly amounts in Social Security income resulting in higher Social Security aggregate amounts. These results more closely match administrative counts compiled by the Social Security Administration.

Workers include members of the Armed Forces and civilians who were at work last week.

Industry codes are 4-digit codes and are based on the North American Industry Classification System 2007. The Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U.S. Statistical Agencies," issued by the Office of Management and Budget.

While the 2008-2012 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2008-2012 American Community Survey

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.

4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

APPENDIX C

2010 Town of Carlisle Housing Production Plan – Executive Summary

TOWN OF CARLISLE HOUSING PRODUCTION PLAN

Members of the Carlisle Housing Production Plan Committee

James Bohn, Carlisle Housing Authority
David Freedman, Carlisle Planning Board
Timothy Hult, Carlisle Board of Selectmen
Tom Lane, Carlisle Planning Board
Alan Lehotsky, Carlisle Housing Authority
John Williams, Carlisle Board of Selectmen, Committee Chair

Elizabeth DeMille Barnett, Carlisle Housing Coordinator

November 2, 2010

TOWN OF CARLISLE HOUSING PRODUCTION PLAN

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TOWN OF CARLISLE HOUSING PRODUCTION PLAN

I. EXECUTIVE SUMMARY

A. Introduction

Carlisle is a residential community approximately 25 miles northwest of Boston, between the inner and outer beltways of Interstate I-95/MA Route 128 and Interstate 495 and the radial MA Routes 2 and 3. Carlisle has a strong commitment to maintaining its rural, small village character and prides itself on its history, schools, and distinct sense of place. The social and physical focus of the town is Carlisle Center. However, the distinctive physical and historical elements of Carlisle are widely spread throughout town, with open vistas, tree-canopied roads, and farming structures reflecting the town's rural history and character.

Population growth has put significant pressures on the housing market. Almost all housing units in Carlisle are owner-occupied, single-family houses, with a median sale price now well above \$700,000. Because the town has no public water or sewer, and because of the extensive wetland and ledge found here, these lots typically have at least two acres. The escalating housing prices in the current market are attracting greater attention from private developers interested in Chapter 40B development. Town leaders and residents now recognize that different strategies are required to better plan for housing development that is more directed to serving local needs and objectives.

Based on the most recent data (per 2000 U.S. Census) from the Massachusetts Department of Housing and Community Development (DHCD) on the Chapter 40B Subsidized Housing Inventory, Carlisle had 1,647 year-round housing units, of which 18 could be counted as affordable,¹ representing 1.09% of the year-round housing stock. According to Chapter 40B regulations, if a municipality has less than 10% of its year-round housing set-aside for low- and moderate-income residents, it is not meeting the state standard for affordable housing. Carlisle is therefore vulnerable to losing control over housing development through Chapter 40B comprehensive permit applications that can override local zoning. To meet the 10% standard, at least 165 of the existing units would have to be "affordable" based on the state's definition, requiring at least another 147 more housing units to be converted to affordable units in Carlisle. Assuming future housing growth, this 10% figure is a moving target; the required minimum number of year-round units will increase with 2010 Census figures.

Undertaking a more proactive housing program to build more affordable housing will be a significant challenge in Carlisle for many reasons, including the following:

- Concerns about constraints of existing infrastructure such as the lack of public water and sewer;
- A school building complex that is currently in poor condition and in the process of renovation and expansion for certain programs but not adding capacity or allowing for the significant population increases that might come from an influx of new housing development;
- Current zoning that limits denser development;
- The high cost of land that drives development costs higher and makes town land purchases difficult; and
- Financial resources to subsidize affordable housing are limited;

¹ There are currently 20 certified affordable units.

Early in 2005, the Board of Selectmen established the Affordable Housing Plan Task Force to oversee the preparation of an Affordable Housing Plan that would meet the requirements of 760 CMR 31.07 (1)(i) under the state's Planned Production Program and current state requirements of Executive Order 418 Housing Certification. Approval of this plan and then certification based on actual production of affordable units under these regulations would enable the town to deny unwelcome Chapter 40B comprehensive permit applications without developer appeal and to be competitive for state subsidies for transportation, economic development, environment, infrastructure and housing. In 2009, the Selectmen established the Housing Production Plan Committee to update the 2005 Plan.

This Affordable Housing Plan suggests a range of options to meet pressing local housing needs and to bring Carlisle closer to the state 10% threshold and to present a proactive housing agenda of Town-sponsored initiatives. Due to the rising costs of homeownership, many residents are finding it increasingly difficult to afford to remain in Carlisle, including children who would like to raise their own families locally, long-term residents, especially the elderly, and town employees. More housing options are required to meet these local needs and produce Carlisle's fair share of regional needs. Both anecdotal and hard evidence obtained in a 2009 Town Survey as well as the substantial interest expressed by senior residents in being placed on a waiting list for the recently permitted Benfield senior residential project point to a growing need for senior housing in ways that were not readily apparent even five years ago. The high cost of home ownership also indicates a need for affordable rental housing.

B. Housing Goals

The following goals represent the building blocks this updated Housing Production Plan:

- Meet local housing needs along the full range of incomes, promoting social and economic diversity and the stability of individuals and families living in Carlisle;
- Leverage public and private resources to the greatest extent possible;
- Insure that new housing is harmonious with the existing community;
- Meet annual planned production goals for affordable housing, working towards the 10% state standard;
- Provide a wide range of housing alternatives to meet diverse housing needs;
- Promote smart growth development; and
- Preserve the existing affordable housing stock.

C. Summary of Housing Needs Assessment

The Housing Needs Assessment presents an overview of the current housing situation in the town of Carlisle and provides the context within which a responsive set of strategies can be developed to address housing needs and meet production goals. Key findings in regard to household characteristics, housing characteristics, and housing affordability are summarized in the following:

Household Characteristics

- Carlisle is one of the most affluent communities in Massachusetts. The median household income in 1999 was \$129,811, up 55% from the 1989 median income and well above the median income for Middlesex County of \$60,821 and the Boston region of \$55,234.
- Those earning more than \$100,000 almost doubled over the decade between 1989 and 1999—from 583 to 1,010 households – well over what would be expected under normal inflationary trends.
- Despite indications of great wealth, there still remains a population living in Carlisle with limited means. According to 2000 census figures, of the 1,628 total households 237, or 14.6% had incomes at or below 50% of area median income. Further, the poverty rate, while relatively low,

is increasing in Carlisle. Census data indicates in 2000, 111 individuals and 21 families had incomes that would place them below the poverty level.

- The population has remained predominantly White with minority representation at 6.5%, most of Asian descent.
- The town's population is aging. Those 65 years or older comprised 8.4% of residents in 2000, up from approximately 5.7% in 1980. This trend will be shown to be accelerating.
- Almost one-third of all residents are 19 years and younger, somewhat higher than the county level of 25.1% and that for the country as a whole of 25.7%.
- Demographic trends suggest that escalating housing costs may be pricing younger individuals and families out of the housing market. Those entering the labor market and forming new families are dwindling in numbers and reducing the pool of entry-level workers and service employees as well as forcing the grown children who were raised in town to relocate outside of Carlisle.
- There are a number of residents who have special needs and are disabled, including 46 or 3.8% of the school-age population, 185 or 6.6% of those 21 to 64 (about one-quarter of whom could not be employed), and 79 or 19.7% of those 65 years or older.
- More than one-third of the total population moved to a different house during the last five years; such sales tend to accelerate the increase in housing prices.

Housing Characteristics

- The 2000 census counted 1,655 total housing units in the town of Carlisle, up 10.7% from 1,495 units in 1990 and a 56.9% increase from 1,055 units in 1980.
- Carlisle has 1,618 occupied units, of which 93.8% were owner-occupied and 6.2% were rental units. These figures represent a considerably higher level of owner-occupancy than that for Middlesex County as a whole of 61.7% and for the Boston region of 57%.
- The 2000 census indicates that 95% of the existing housing units are in single-family detached structures, a significantly higher percentage than the 49% level for the county and 44% for the Boston region.
- Vacancy statistics from the 2000 census are very low, indicating tight market conditions.
- Almost 800 units, or half of Carlisle's housing stock, were built prior to 1970. Another 37.8% were produced between 1970 and 1990.

Housing Affordability

- Almost 20% of Carlisle residents, or about 350 households, are currently living in housing that is by common definition beyond their means and unaffordable.
- There are no longer homes available for less than \$200,000 that would be affordable to low- and moderate-income households.
- To buy a home at the median sales price \$720,000 requires an income of about \$225,000, significantly more than the town residents' 2000 median income of \$129,811. Approximately 80% of Carlisle's households have an income lower than would be required for a first-time home-buyer at this price level.
- The borrowing power of the average household is about \$420,000, less than the average price of a building lot.
- The affordability gap is about \$300,000 – the difference between the price of the median priced home and what a median income household can afford. The affordability gap almost doubles to \$540,000 for low- and moderate-income households earning at or below 80% of area median income.
- The 2000 census indicated that the median gross rental was \$1,400, significantly higher than the 1990 median rent of \$667, and requiring an income higher than that of about 20% of Carlisle's households. More recent market rentals are significantly higher ranging from \$1,500 for a small apartment to as much as \$4,000 for some houses.

Supply and Demand

- A survey of neighboring communities indicates long waiting times for all types of affordable housing, confirming that the supply does not meet demand, particularly for seniors, others in need of affordable rentals, and disabled residents.
- Local preference considerations in neighboring communities further limit access for Carlisle residents when affordable units do become available in neighboring communities.

D. Summary of Affordable Housing Planned Production Goals

The State administers the Planned Production Program that enables cities and towns to adopt an affordable housing plan that demonstrates production of .50% over one year or 1.0% over two-years of its year-round housing stock eligible for inclusion in the Subsidized Housing Inventory. A municipality may request that the Department certify its compliance with an approved Housing Production Plan (HPP) if it has increased its number of SHI Eligible Housing units in an amount equal to or greater than its 0.50% production goal for that calendar year. SHI Eligible Housing units shall be counted for the purpose of certification in accordance with the provisions for counting units under the SHI set forth in 760 CMR 56.03(2). Requests for certification may be submitted at any time, and the Department shall determine whether a municipality is in compliance within 30 days of receipt of the municipality's request. If the Department determines the municipality is in compliance with its HPP, the certification shall be deemed effective on the date upon which the municipality achieved its numerical target for the calendar year in question, in accordance with the rules for counting units on the SHI set forth in 760 CMR 56.03(2). A certification shall be in effect for a period of one year from its effective date. If the Department finds that the municipality has increased its number of SHI Eligible Housing units in a calendar year by at least 1.0% of its total housing units, the certification shall be in effect for two years from its effective date.

Carlisle will have to produce approximately 8 affordable units annually to meet these production goals through 2010. When the 2010 census figures become available in 2011, this number will be higher, most likely at least 10-12 units. If the State certifies that the locality has complied with its annual production goals, the Town may, through its Zoning Board of Appeals, deny comprehensive permit applications without opportunity for appeal by developers.

Using the strategies summarized under the Housing Action Plan described in Section VI, the Town of Carlisle has developed a Planned Production Program to chart affordable housing production activity over the next five years. The goals are based largely on the following criteria:

- To the greatest extent possible, at least 50% of the units that are developed on Town-owned parcels should be affordable to households earning at or below 80% of area median income and at least another 10% affordable to those earning up to 150% of area median income, depending on project feasibility. The rental projects will also target some households earning at or below 60% of area median income depending upon subsidy program requirements.
- Projections are based on a minimum of four units per acre. However, given specific site conditions and financial feasibility it may be appropriate to increase or decrease density as long as projects are in compliance with state Title V and wetlands regulations.
- Because housing strategies include some development on privately owned parcels, production will involve projects sponsored by private developers through the standard regulatory process or “friendly” comprehensive permit process. The Town plans to

promote increased affordability in these projects, working with developers to incorporate at least 40% of the units as affordable.

- The projections involve a mix of rental and ownership opportunities. The Town will work with private developers to promote a diversity of housing types directed to different populations with housing needs including families, seniors and other individuals with special needs to offer a wider range of housing options for residents.

E. Summary of Housing Action Plan

The strategies outlined below are based on previous plans, reports, studies, the Housing Needs Assessment, and the experience of other comparable localities in the Metro West area and throughout the Commonwealth. The strategies are grouped according to the type of action proposed – Planning and Regulatory Reform, Building Local Capacity, Housing Production, and Housing Preservation.

1. *Implement Planning and Regulatory Reforms*

The Town of Carlisle should consider the following planning and zoning-related strategies to promote the creation of additional affordable units.

- Adopt inclusionary zoning
- Amend Residence District M to allow higher density if tied to a waste water treatment plant
- Promote use of existing bylaw allowing by-right conversion of pre-1962 single-family homes to two-family and consider expanding the Bylaw to allow conversion of post-1962 dwellings
- Waive permit fees for affordable housing projects and streamline the permit approval process

2. *Build Local Capacity*

In order to be able to carry out the strategies included in this Affordable Housing Plan and meet the Planned Production goals, it will be important for the Town of Carlisle to build its capacity to promote affordable housing activities. This capacity includes gaining access to greater resources – financial and technical – as well as building local political support, developing partnerships with public and private developers and lenders, and creating and augmenting local organizations and systems that will support new housing production.

- Conduct educational campaign
- Reestablish the Carlisle Municipal Land Committee
- Provide support to Zoning Board of Appeals
- Continue Annual Housing Summits
- Access new housing resources

3. *Housing Production*

To accomplish the actions included in this Affordable Housing Plan and meet production goals, it will be essential for the Town of Carlisle to reach out to the development community and sources of public and private financing to secure the necessary technical and financial resources. While some of the units produced will rely on the participation of existing homeowners, most of the production will require joint ventures with developers – for profit and non-profit – to create affordable units. In addition to the active participation of the development community, it will be important for Carlisle to

actively seek support from state and federal agencies. The production of a substantial number of new affordable units will likely require subsidies beyond what is available through the Community Preservation Fund.

- Make Town-owned land available for affordable housing
- Incorporate accessory apartments in the Subsidized Housing Inventory
- Support scattered-site housing
- Convert existing housing units to affordability

4. *Housing Preservation*

Housing production is critical, but the Town also needs to be concerned that it does not lose units already counted as part of its Subsidized Housing Inventory and provides resources to support the deferred home maintenance needs of lower income residents, including seniors.

- Monitor affordability of Subsidized Housing Inventory
- Help qualifying homeowners access housing assistance
- Offer additional tax relief to seniors

F. Summary Description of Use Restrictions

Carlisle is committed to maintaining its Subsidized Housing Inventory for as long a period as possible. Deed riders or affordable rental restrictions should assure continued affordability in perpetuity to the greatest extent possible.

II. INTRODUCTION

Carlisle is a residential community approximately 25 miles northwest of Boston, between the inner and outer beltways of Interstate-95/MA Route 128/95 and Interstate 495 and the radial MA Routes 2 and 3. The town is bordered by the six communities of Acton, Bedford, Billerica, Chelmsford, Concord and Westford. Carlisle has a strong commitment to maintaining its rural, small village character and prides itself on its history, schools, and distinct sense of place. The social and physical focus of the town is Carlisle Center that includes a concentration of public services, small businesses and traffic. However, the physical and historical distinctions of Carlisle are widely spread throughout town, with open vistas, canopied roads, and farming structures reflecting the town's rural history and character, highly valued by its citizens.

Population growth has put significant pressures on the housing market, especially between 1950 and 1970 when the population nearly tripled in size. The rate of growth has slowed down since that time, but the town is still gaining new residents who have been accommodated through comparable growth in the housing stock. It is also worth noting that the 12.9% increase in population from 4,923 in 2000 to 5,557 in 2009 is, on a decade basis, an increase over the rate of population growth from 1990 to 2000. Since 1950, however, only 20 affordable units have been produced.² At the time of the 2000 Census, Carlisle had 1,655 housing units,³ almost all of which are owner-occupied, single-family houses on lots that are typically at least two acres with a median sale price for 2009 of \$746,750⁴. The high housing prices, as well as the still high cost of a buildable housing lot in the current market have attracted greater attention

² An additional 26 affordable rental units to be developed on Town-owned land are expected to be built, pursuant to a Comprehensive Permit recently granted by the Carlisle Zoning Board of Appeals.

³ While there are 1,655 total housing units cited in the 2000 census, there were 1,647 year-round housing units on which the 10% state Chapter 40B goal is based.

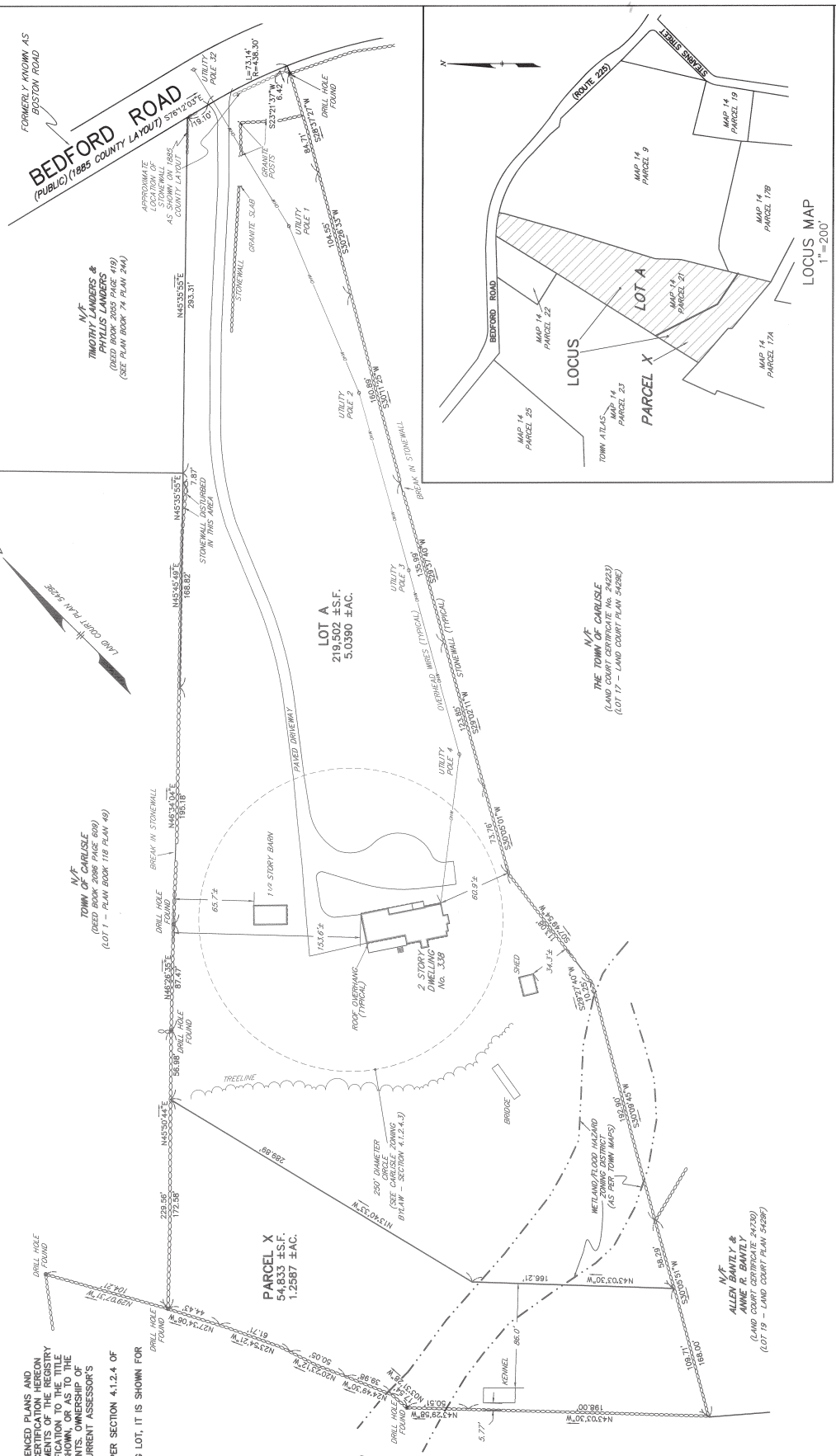
⁴ The Warren Group, March, 2010

APPENDIX D

338 Bedford Road Surveyor's Map

NOTES:

1. THIS PLAN IS BASED ON THE REFERENCED PLANS AND AN ON THE GROUND SURVEY. THE CERTIFICATION HEREON IS INTENDED TO MEET THE REQUIREMENTS OF THE REGISTRY OF DEEDS AND RECORDS, AND TO BE A TRUE AND CORRECT COPY OF THE ORIGINAL SURVEY, OR OWNERSHIP OF THE PROPERTY SHOWN, OR AS TO THE EXISTENCE OF UNRECORDED EASEMENTS, OWNERSHIP OF ADJUTING PROPERTIES ARE FROM CURRENT ASSESSOR'S RECORDS.
2. LOT A IS A "POK CHOP LOT" AS PER SECTION 4.1.2.4 OF THE CARLISLE ZONING BYLAW.
3. PARCEL X IS NOT A LEGAL BUILDING LOT, IT IS SHOWN FOR CONVEYANCE PURPOSES.



PLANNING BOARD ENFORCEMENT
IS NOT A DETERMINATION AS TO
THE CONFORMANCE WITH ZONING
REQUIREMENTS.
APPROVAL OF THIS PLAN BY THE
PLANNING BOARD IS NOT REQUIRED
FOR THE REGISTRY OF DEEDS.

CARLISLE PLANNING BOARD

APPROVED AND FORWARDED
PLAN BOOK 336 OF 1
SHEET 1 OF 1
DATE: **NOV 10, 2013**
= [Signature]

APPROVED AND FORWARDED
PLAN BOOK 336 OF 1
SHEET 1 OF 1
DATE: **NOV 10, 2013**
= [Signature]

RECEIVED AND FORWARDED
PLAN BOOK 336 OF 1
SHEET 1 OF 1
DATE: **NOV 10, 2013**
= [Signature]

APPENDIX E

338 Bedford Road Site Context



Master Plan for 338 Bedford Road, Carlisle MA

APPENDIX F

338 Bedford Road Parcel, Carlisle - Deed

Return to:



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Bk: 27261 Pg: 256 Page: 1 of 4
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2

Quitclaim Deed

I, **PHYLLIS MOSELEY GOFF f/k/a PHYLLIS E. MOSELEY**, a married woman, of Carlisle, Middlesex County, Massachusetts

for consideration paid and in full consideration of Five Hundred Ninety Thousand and 00/100 (\$590,000.00) Dollars

grant to **THE TOWN OF CARLISLE AFFORDABLE HOUSING TRUST FUND, Under Declaration of Trust, dated October 24, 2006, as evidenced by Trust Certificate recorded herewith**

with quitclaim covenants

A certain parcel of land with the buildings thereon situated in Carlisle, Middlesex County, Massachusetts, being shown as Lot A on a plan entitled "Plan of Land in Carlisle, Massachusetts (Middlesex County) For: Daniel Moseley, Scale: 1" = 40', October 16, 2012, Stamski and McNary, Inc.," said plan to be recorded herewith.

Containing 219,502 square feet of land, according to said plan.

The premises are hereby conveyed to Grantee subject to a perpetual public trust that the Premises may be used only for one or more of the following purposes:

a. active and passive recreational uses including, without limitation, one or more ballfields and one or more tennis courts, basketball courts, trails, fences, game viewing stands, scoreboards, recreational buildings and structures including without limitation a senior center and/or a community center containing recreational facilities, accessory parking, underground fire cisterns, and the like;

b. access and egress to and from Bedford Road, a public way, for either or both of the Premises and abutting land now owned by the Town of Carlisle, commonly known as the Banta Davis Land, containing 38 acres, more or less, including without limitation, any multi-family housing;

c. public and private utilities and services serving either or both of the Premises and/or said abutting Banta Davis Land and any buildings and/or structures which may now or hereafter be located on said Banta Davis Land, including without limitation any multi-family housing, as well as the recreational buildings and/or uses described in (a) above; and/or

d. (i) one single family house, (ii) one or two group home(s) for the developmentally disabled of up to ten (10) bedrooms, total, for all such group homes, and (iii) garages, barns, parking, wells, septic systems, leachfields, drainage, landscaping, lighting, and

Property Address: 388 Bedford Road, Carlisle, MA

similar customary accessory buildings, structures and/or uses serving any of the foregoing purposes (a) through (d).

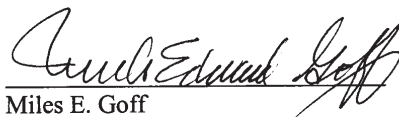
Being a portion of the premises conveyed to me by deed from John A. Davis, recorded with the Middlesex North District Registry of Deeds in Book 1765, Page 130.

No Deed stamps are required under U.C.M.D. Section 1.

Witness my hand and seal this ____ day of May, 2013.


Phyllis Moseley Goff


I, **MILES E. GOFF**, Husband of Phyllis Moseley Goff, hereby waive any and all rights of Homestead in the property being conveyed and warrant that there are no other persons entitled to any Homestead rights on the property pursuant to M.G.L. c. 188.


Miles E. Goff

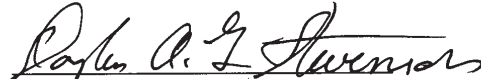
By acceptance and recording of the Deed, the Grantee hereby assents that it is taking title to the Premises subject to the public trust stated herein.

GRANTEE

Town of Carlisle Affordable Housing Trust



Greg D. Peterson, Chair and Trustee



Douglas A.G. Stevenson, Trustee

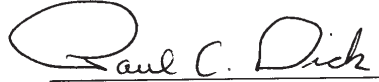


John D. Williams, Trustee

The Commonwealth Of Massachusetts

Middlesex, ss.

On this 10th day of May, 2013, before me, the undersigned notary public, personally appeared the above-named **PHYLLIS MOSELEY GOFF**, proved to me through satisfactory evidence of identification being (check whichever applies): ☐ driver's license or other state or federal governmental document bearing a photographic image, ☐ oath or affirmation of a credible witness known to me who knows the above signatory, or ☒ my own personal knowledge of the identity of the signatory, to be the person whose name IS signed on the preceding document, and acknowledged to me that she signed it voluntarily for its stated purpose.

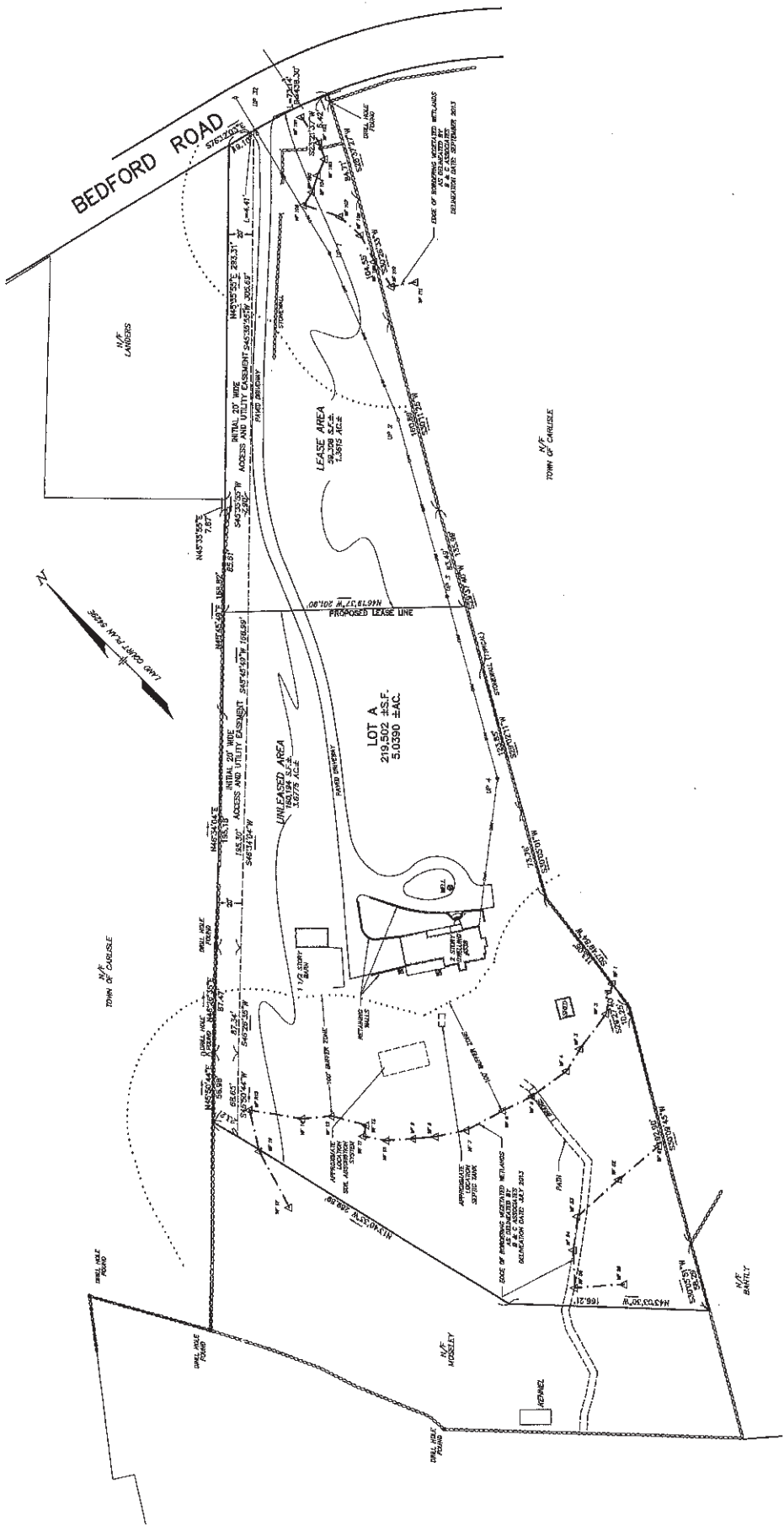


Notary Public - Paul C. Dick

My Commission Expires: 12/29/17

APPENDIX G

Area to be Leased – 338 Bedford Road



PLAN OF LAND
IN
CARLISLE, MASSACHUSETTS
(MIDDLESEX COUNTY)
FOR: **CARLISLE HOUSING AUTHORITY**
SCALE: 1"=40' MARCH 28, 2014
REVISED: JUNE 13, 2014
STAMSKI AND MONARY, INC.
100 MAIN STREET
CARLISLE, MASSACHUSETTS 01821
DRAWING - PLANNING - CONCEPTS
0 20 40 60 80 100 120 140 FT
(501TALEAS2.dwg) Bedford Road SH-5001A

NOTES:
1) THIS PLAN IS BASED ON THE RECORDED PLANS AND AN INTENTED TO MEET THE REQUIREMENTS OF THE RECORDS OF THE TOWN OF CARLISLE. THE CERTIFICATION HEREON IS INTENDED TO MEET THE REQUIREMENTS OF THE RECORDS OF THE TOWN OF CARLISLE. THE CERTIFICATION HEREON IS INTENDED TO MEET THE REQUIREMENTS OF THE RECORDS OF THE TOWN OF CARLISLE. THE CERTIFICATION HEREON IS INTENDED TO MEET THE REQUIREMENTS OF THE RECORDS OF THE TOWN OF CARLISLE.
2) THE PURPOSE OF THIS PLAN IS TO DELINEATE THE EXISTING AND PROPOSED LEASE AREA AND INITIAL ACCESS AND UTILITY EASEMENT.

ZONING DISTRICT
RESIDENCE B
PROJECT LOCATION
338 BEDFORD ROAD
TOWN MAP 14 PARCEL 21

RECORD OWNER
THE TOWN OF CARLISLE AFFORDABLE HOUSING TRUST FUND
CARLISLE, MA

REFERENCE
MIDDLESEX REGISTRY OF DEEDS
NORTH DISTRICT
DEED BOOK 27291 PAGE 256
PLAN BOOK 235 PAGE 1



THIS PLAN SHOWS THE PROPERTY LINES THAT ARE THE LINES OF EXISTING OWNERSHIP, AND THE LINES OF STREETS AND WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF OWNERSHIP OR FOR NEW WAYS ARE SHOWN. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERED PROFESSIONAL LAND SURVEYORS OF THE COMMONWEALTH OF MASSACHUSETTS.

DATE 6/27/13
REGISTERED PROFESSIONAL LAND SURVEYOR

REGISTERED AND OWNED
MIDDLESEX REGISTRY OF DEEDS
PLAN BOOK 235, PLAN 20
SHORT OF 1
DATE: JUNE 27, 2014
BY: [Signature]



2014 00024269

Bk: 28280 Pg: 211 Page: 1 of 3

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NOTICE OF LEASE

In accordance with G.L. c. 183, §4, notice is hereby given of the following described Ground Lease and to provide notice of the referenced Ground Lease:

Commencement Date: June 30, 2014.

Landlord: **Carlisle Affordable Housing Trust**, having a principal place of business at c/o 66 Westford Street, Carlisle, MA 01741. Reference is made to the Vote taken under Article 1 of the November 13, 2012 Special Town Meeting, a certified copy of which is attached hereto and incorporated herein.

Tenant: **Carlisle Housing Authority**, established pursuant to G.L. c. 121B and having a principal place of business at c/o Carlisle Town Hall, 66 Westford Street, Carlisle, MA 01741.

Leased Premises: A certain portion of the Property located at 338 Bedford Road, Carlisle, Massachusetts conveyed to the Carlisle Affordable Housing Trust in a deed recorded with the Middlesex Registry of Deeds in Book 27261, Page 256, consisting of approximately 1.3615 acres (59,308 sq. ft.), more or less, and shown as "Lease Area" on a plan entitled "Plan of Land in Carlisle, Massachusetts (Middlesex County) For: Carlisle Housing Authority" dated March 28, 2014, prepared by Stamski and McNary, Inc., to be recorded herewith.

Term: 99 years, commencing on June 30, 2014.

Extension Term: None.

Encumbrances: All matters of record insofar as in force and applicable, together with all rights and easements reserved under the Lease.

[signature page follows]

PROPERTY ADDRESS: 338 BEDFORD ROAD, CARLISLE, MA

Signed under seal as of this 30 day of June, 2014

Carlisle Affordable Housing Trust,

By: Greg D. Peterson
Its: Chair

Carlisle Housing Authority

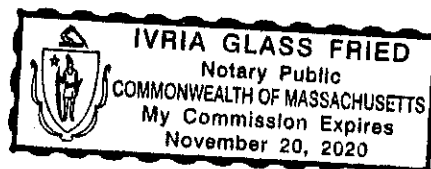
By: ALAN LENDERSKY
Its: CHAIR

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss

On this 30 day of June, 2014, before me, the undersigned Notary Public, personally appeared the above-named GREG PETERSON, member of the Carlisle Affordable Housing Trust, proved to me by satisfactory evidence of identification, being (check whichever applies): ☒ driver's license or other state or federal governmental document bearing a photographic image, ☐ oath or affirmation of a credible witness known to me who knows the above signatory, or ☐ my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing to be signed by him/her voluntarily for its stated purpose.

[Signature]
Notary Public
My Commission Expires:

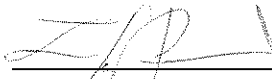


PROPERTY ADDRESS: 338 BEDFORD ROAD, CARLISLE, MA

COMMONWEALTH OF MASSACHUSETTS

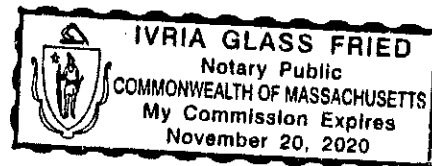
Middlesex, ss

On this 30 day of June, 2014, before me, the undersigned Notary Public, personally appeared the above-named Alan Lehotsky, member of the Carlisle Housing Authority, proved to me by satisfactory evidence of identification, being (check whichever applies): ☒ driver's license or other state or federal governmental document bearing a photographic image, ☐ oath or affirmation of a credible witness known to me who knows the above signatory, or ☐ my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing to be signed by him/her voluntarily for its stated purpose.



Notary Public

My Commission Expires: Nov 20, 2020



PROPERTY ADDRESS: 338 BEDFORD ROAD, CARLISLE, MA

APPENDIX H

Phase I Environmental Assessment, Engineering Consulting Resources, Inc., October 15, 2012

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
338 BEDFORD ROAD
CARLISLE, MASSACHUSETTS**



Prepared for:
Mr. George Dimakarakos, P.E.
Stamski & McNary, Inc.
1000 Main Street
Acton, MA 01720

Prepared by:
Engineering & Consulting Resources, Inc.
PO Box 966
Acton, Massachusetts 01720-0966
(978) 500-3199
www.ecr-consulting.com
October 15, 2012

EXECUTIVE SUMMARY

Engineering & Consulting Resources, Inc. (ECR) performed a Phase I Environmental Site Assessment (ESA) for 338 Bedford Road in Carlisle, Massachusetts (the "Property"). The Property is shown on the attached site plan (Figure 2). The 5-acre property is identified in Town of Carlisle records as Map 14, Parcel 21.

The purpose of this ESA was to evaluate the presence or possible presence of Recognized Environmental Conditions at the Property. The Phase 1 ESA was conducted in general accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-05).

The conclusion of this ESA is as follows:

- **Recognized Environmental Conditions were not identified during the ESA.**

The conclusions expressed herein are subject to the Limitations and Exceptions noted in Section 1.3 of this report, the Terms and Conditions referenced in Section 1.4 of this report, in other sections of this report, and in the Agreement between ECR and Stamski & McNary, Inc.

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

338 BEDFORD ROAD
CARLISLE, MASSACHUSETTS

1.0 INTRODUCTION

1.1 PURPOSE

Engineering & Consulting Resources, Inc. (ECR) performed a Phase I Environmental Site Assessment (ESA) for 338 Bedford Road in Carlisle, Massachusetts (the "Property"). The Phase I ESA was prepared in general accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-05). As stated in E1527-05, an ESA is intended to satisfy one of the requirements of the innocent landowner defense to liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The purpose of this ESA was to evaluate the presence or possible presence of environmental contamination associated with the Property. For the purpose of this ESA, any identified presence or possible presence of environmental contamination associated with the Property will include "Recognized Environmental Conditions," which are defined in E1527-05 as:

"... the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.... The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

This report was prepared by Richard E. Doherty, P.E., L.S.P., whose qualifications are described in the resume attached in Appendix G.

1.2 SCOPE OF SERVICES

The scope of services for this ESA was based on the following tasks:

- Review the physical setting of the Property to assess potential migration through the soil or groundwater of releases identified or potentially affecting the Property.
- Conduct an environmental database search and historical records review through available state, federal and local environmental records for the Property, and to the extent reasonably accessible, those properties that lie

within a 1/2 mile radius of the Property. The following sources were reviewed:

1. *Federal.* United States Environmental Protection Agency (USEPA) Comprehensive Response Compensation and Liability Information System Listing (CERCLIS), Resource Conservation and Recovery Act (RCRA) list, National Priorities List (within 1.0 mile radius), RCRA CORRACTS facilities list (1.0 mile), RCRA Generators list and Emergency Response Notification System (ERNS) list (property only)
 2. *State.* Massachusetts Department of Environmental Protection Agency (MassDEP) Waste Site Cleanup Searchable Site list.
 3. *Local.* The Town of Carlisle Board of Health, Assessor's, Building, Conservation Commission, and Fire Department records.
- Review historic aerial photographs and Sanborn Fire Insurance Maps (if available) for the Property to better understand the history of the Property and its immediately surrounding area.
 - Perform a visual assessment of the Property for evidence of use, storage or release of oil or hazardous materials. Observations will include interior and exterior areas, locations of heating systems, utility poles and/or transformers, floor drains and the source of drinking water. Property photographs will document the assessment, particularly of any areas of potential concern which may include: storage tanks, containers of petroleum products or hazardous materials, polychlorinated biphenyls, drains, pits, ponds, stains, stressed vegetation, solid waste, wastewater and wells.
 - During the Property visit, ECR will conduct interviews with the property owner or site manager to obtain information on the Property and the immediate vicinity. Material Safety Data Sheets, if any, shall be reviewed, along with environmental audit and/or assessment reports, and permits.
 - A limited search for environmental liens on the Property will be reviewed through the Northern Middlesex Registry of Deeds.

The following items were not included in the scope of work for the ESA:

- performing a 50-year chain-of-title search;
- identifying asbestos-containing materials, radon, wetlands, or lead-based paint;
- soil, groundwater and/or air sampling.

1.3 LIMITATIONS AND EXCEPTIONS

ECR performed the site assessment described herein in a manner consistent with ASTM E 1527-05 and consistent with the level of care and skill ordinarily exercised by other environmental consultants performing similar services under similar circumstances.

This ESA is not intended to constitute an exhaustive assessment of the Property, but rather to reduce uncertainty regarding the possible presence of Recognized Environmental Conditions as defined in ASTM E1527-05. Therefore, the findings and conclusions of the ESA report do not constitute scientific certainties, but rather probabilities based upon our professional judgment concerning data reviewed during the assessment. ECR cannot represent that the Property does not contain hazardous materials or other latent environmental conditions beyond those detected or observed during performance of this ESA.

1.4 TERMS AND CONDITIONS

The report is subject to ECR's Standard Terms and Conditions which form a part of the agreement between ECR and the Client.

1.5 USER RELIANCE

This report is provided to Mr. George Dimakarakos of Stamski & McNary. Stamski & McNary is providing services related to the Property to the Town of Carlisle. Therefore, the Town of Carlisle is considered the "User" of this ESA. The report may be reviewed by financial lending institutions for the purposes of evaluating the issuance of loans on the Property to the User. Should additional information relevant to this ESA become available in the future, the findings of this ESA report should be reevaluated by ECR or another qualified environmental professional. As described in ASTM E1527-05, if more than 180 days have elapsed since completion of this ESA, the ESA will need to be updated or replaced via the performance of a new or updated ESA.

This report has been prepared for the exclusive use of the party commissioning this report under Agreement with ECR, together with the Town of Carlisle and any financial institutions acting on behalf of the Town in association with the proximate real estate transaction. No other parties are entitled to rely on the conclusions, data, or opinions contained in this report. Any such reliance by third parties without the written permission of ECR is at their own risk.

The User may show or deliver any of the site assessment work done by ECR to any person or entity provided that the User informs such person or entity in writing that such work is subject to the terms of the Contract between User and ECR, and that such work shall not be relied upon in any way. User will deliver a copy of the Contract to such person or entity at the time ECR's work is shown or delivered to such person or entity.

2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The Property, located at 338 Bedford Road in Carlisle, MA, is an approximately

rectangular-shaped parcel located in a mixed residential and commercial area. The Property is shown on the aerial image on the title page of this report, and on the attached Site Plan (Figure 2). The Property is identified in the Town of Carlisle Assessor's records as Map 14, Parcel 21 (see Appendix A).

The Property previously consisted of 6.22 acres, but it our understanding that approximately 1.2 acres at the rear (south) of the Property has recently been sold to a third party. This ESA therefore is limited to the approximately 5 northernmost acres of Parcel 21. All references to the Property in this ESA are intended to refer to the remaining 5 acres of Parcel 21.

A two-story single-family dwelling is located on the southern (rear) portion of the Property. Town records indicate that the Property is currently owned by Phyllis E. Moseley.

The Universal Transverse Mercator (UTM), and Latitude and Longitude coordinates for the Property are:

UTM Coordinates

m x 307887.8
m y 4710494.5

Latitude & Longitude Coordinates

Lat 42° 31' 29.64" N
Long 71° 20' 20.04" W

2.2 PROPERTY AND VICINITY GENERAL CHARACTERISTICS

The Property is located in a rural commercial and residential area of Carlisle, Massachusetts and is zoned residential. The Property includes a 3,982 square foot 2-story residence built in 1966 and an attached garage. A long paved driveway leads gradually upward from Bedford Road to the dwelling at the southern portion of the Property. Vegetated areas (primarily lawn) abut the driveway to the east and west, as shown on the Google Earth image on the title page of this report.

The Property is located between two Town-owned properties that are shown as Protected Open Spaces on MassDEP's Numerical Ranking System (NRS) map (see Appendix C). The uses of these properties are discussed in subsequent sections of this ESA. Wetland areas are shown on the NRS map to the east and south of the Property.

2.3 CURRENT USE OF THE PROPERTY

The 338 Bedford Road Property is currently utilized as a residence.

2.4 DESCRIPTION OF SITE UTILITIES

The Property is serviced by overhead electric lines, an on-site water supply well, and an on-site septic system. The water supply well provides water for household use and an exterior sprinkler system. The residence is heated using #2 fuel oil currently stored in an aboveground storage tank housed in a wooden enclosure attached to the east side of the

dwelling. Heating oil was formerly stored in a 2,000-gallon steel underground storage tank (UST) located near the northeast building corner. As discussed in Section 5.2, this UST was removed in approximately January 1998.

2.5 CURRENT USES OF ADJOINING PROPERTIES

A commercial/agricultural property (Kimball-Bates Farm/Ice Cream Stand) is located across Bedford Road. Residential properties exist to the south and northwest. To the east and west are Town-owned properties: the Banta-Davis Playing fields and the Fox Hill conservation area, a portion of which is currently leased by the Town to agricultural users. Further west of the Property is the Green Cemetery.

3.0 USER-PROVIDED INFORMATION

3.1 TITLE RECORDS

No title records were provided by the User.

3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

The User was not aware of the existence of any environmental liens or activity/use limitations related to the Property.

3.3 SPECIALIZED KNOWLEDGE

The User does not have specialized knowledge or experience related to the Property. Although the Town of Carlisle owns the abutting properties to the east and west (i.e., the Banta-Davis playing fields and the Fox Hill conservation area), the User does not have specialized knowledge of the chemicals and processes that may have been used at the Property.

3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

The User was aware that the property has been in residential use since approximately 1966, but was not aware of chemical use, spills or other chemical releases, previous environmental cleanups, or obvious indications of the presence of contamination at the Property.

3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

According to the User, the Property is not being offered at a discount to its fair market value.

3.6 OWNER, PROPERTY MANAGER AND OCCUPANT INFORMATION

Ms. Phyllis Moseley-Goff and her son, David Moseley, represented the current occupant of the Property. Ms. Moseley-Goff currently resides at the Property. A portion of the Property is rented to a tenant.

3.7 REASON FOR PERFORMING PHASE 1

The Town of Carlisle is considering purchase of the Property for use for a number of purposes, potentially including residential and recreation-related uses.

4.0 INTERVIEWS

As part of this ESA, the following persons were interviewed:

- Ms. Phyllis Moseley-Goff, owner and current occupant, on October 9, 2012
- Mr. David Moseley, son of the owner and current occupant, and former resident, on October 9 and 11, 2012
- Ms. Sylvia Willard, Carlisle Conservation Commission office, on October 9, 2012
- Ms. Melissa Stamp, Assessor, on October 9, 2012
- Ms. Elizabeth Barnett, representing the Town of Carlisle (the User), on October 11, 2012
- Ms. Marianne McInerney, Assessor's office, on October 11, 2012

Information obtained from interviews is included in this report.

5.0 RECORDS REVIEW

The following records were reviewed as part of this ESA:

An Environmental Data Resources (EDR) database search for 338 Bedford Road in Carlisle, MA was obtained. The EDR report, attached in Appendix D, contains a listing of databases reviewed and the search criteria. The EDR review also included a city directory search, attached in Appendix E. Sanborn Fire Insurance Maps were not available for the Property vicinity.

Files at the Board of Health, Building Department, Conservation Commission and Assessor's Office were reviewed at Carlisle Town Hall on October 9, 2012. Carlisle Fire Department records for the Property were obtained on October 3, 2012.

The following on-line records were reviewed as part of this Phase 1 ESA:

- Massachusetts Land Records web site (www.masslandrecords.com) on October 1, 2012

- "Searchable Sites" Reportable Release database at Massachusetts Department of Environmental Protection website (<http://public.dep.state.ma.us/SearchableSites/SearchResults.asp>) on October 2, 2012

5.1 PHYSICAL SETTING

The Property is located in a rural, mixed residential and commercial section of Carlisle. The majority of the Property consists of grassed areas that surround the dwelling and the driveway.

According to the MassDEP Bureau of Waste Site Cleanup Massachusetts Contingency Plan (MCP) NRS Map (see Appendix C), the Site is not located within 500 feet of an Interim Wellhead Protection Area, Non-Potential Drinking Water Source area, a public water supply or a potentially productive aquifer. Areas of Critical Environmental Concern were not identified within a 500-foot radius of the Site. The NRS map shows a non-community water source across Bedford Street (on or in the immediate vicinity of the Kimball-Bates Farm) with a wellhead protection area that extends onto the northern portion of the Property.

No areas of estimated habitat of rare wetlands wildlife were identified within 500 feet of the Site. Institutions, as defined in 310 CMR 40.0006, were not identified within 500 feet of the Site.

5.2 PROPERTY HISTORY

According to mortgage documents obtained from the Northern Middlesex Registry of Deeds website, the current owner of the Property is Phyllis E. Moseley. Mr. John A. Davis is listed on mortgage documents as the prior owner. Further information on site ownership was not available.

The Carlisle Building Department records indicate the two-story residence at 338 Bedford Road was built in 1966. Health Department records contained a plan dated August 1966 that indicated the location of a proposed septic system. Ms. Moseley-Goff and Mr. Moseley indicated that the dwelling was built in approximately 1966-67 and was used as a cornfield prior to that date. Mr. Moseley stated that a permit for operation of a dog kennel on the Property was granted by the Town years ago, but the kennel was never constructed.

Fire Department records included a permit dated December 17, 1997 for the removal and off-site disposal of a 2,000-gallon steel UST used to store No. 2 heating oil. The tank was transported to James G. Grant Co., Inc. of Readville, MA on January 8, 1998. Although no records were located that specifically indicated that the tanks and surrounding soils were evaluated for signs of leakage, Mr. Moseley stated that he, other members of his family, and the Town of Carlisle's Building Inspector were present at the time the tank was removed, and that no holes in the tank or other indications of spills or

leakage was observed. It is noted that the December 17, 1997 permit (see Appendix F) and application contain the notations "inspected 12/17/97" and "OK R.K. 12-17-97." In an email, dated October 9, 2012, Chief David R. Flannery of the Carlisle Fire Department verified that the initials "R.K." refer to former Fire Chief Robert J. Koning, "who was the Fire Chief at the time and also conducted the UST inspections".

Available City Directories, attached in Appendix E, included the years 2008, 1995, 1990, and 1985. The Property occupants in 2008 included Rodney A. Blake, Miles Edward Goff, and Phyllis E. Goff. The 1995 Directory indicates Sherri Coldwell and Lawrence Moseley occupied the residence. Lawrence Moseley occupied the property in 1990 and 1985. The 1985 listing also includes B.H.E. MacMellon as a resident.

Mr. Moseley and Ms. Moseley-Goff were not aware of the current presence of USTs on the Property, the past occurrence of spills or releases of hazardous chemicals, the existence of environmental liens, or the existence of prior ESAs for the Property. Records of spills, leaks, and/or potential releases at the Property were not identified in available municipal records.

Health Department records contained laboratory reports from testing of swimming pool water in 1975 for bacteria (the water was deemed "suitable") and testing of well water for volatile organic compounds (VOCs) in 2000 (no VOCs were detected). According to Mr. Moseley, VOC testing was likely requested by the provider of the water treatment system as part of the equipment selection process.

According to available MassDEP records, the Property is not subject to an Activity and Use Limitation (AUL) established under the provisions of 310 CMR 40.0000. Available property records on the MassLandRecords website did not indicate the presence of environmental liens on the Property.

5.3 VICINITY HISTORY

City Directories for years 1985, 1990, 1995 and 2008 indicate the residential property located at 326 Bedford Road was occupied by Timothy Landers. The Kimball Farm property located across Bedford Road (#341 and #343) was owned and/or occupied by Richard Bates in 1985. The 1990 City Directory indicates Dana and Richard Bates are the owners/occupants. Both the 1995 and 2008 City Directories indicate the owner/occupant at 341 Bedford Road is Michael Kimball. The 343 Bedford Road property states the owners/occupants for those years are Paula Michaud and Kimball Farm, Inc.

The Kimball-Bates Farm property has been used as an ice cream stand since at least the 1970s. According to the Kimball Farm history page (www.kimballfarm.com), the Bates family owned and operated the property for 25 years as a dairy farm. The Kimball family leased and eventually purchased the Bates farm in 1989 to serve as an ice cream stand.

The property to the east is conservation land owned by the Town of Carlisle. According to the July 2006 Land Stewardship Committee "Fox Hill Management Plan", the town purchased the 11.22 acre farm land in 1981. The Banta-Davis playing fields are located at 300 Bedford Road to the west of the Property, and are owned by the Town of Carlisle. According to the Carlisle Recreation Department website, the fields include a Little League baseball field, a softball field, a soccer field surrounded by an asphalt running track, and a fitness course. According to the Carlisle Trails committee website (www.carlisletrails.pbworks.com), the 40 acre Banta-Davis land was formerly owned by the Green family since the 1700s. Mr. Moseley stated that the current Banta-Davis playing field property was previously used for growing asparagus. Beyond this is the Green cemetery, also formerly owned by the Green family.

The EDR report (see Appendix D) lists sites in the vicinity where releases of oil and/or hazardous materials have occurred. ECR reviewed the list of nearby sites, and, in ECR's opinion, none of the reported sites constitutes a threat to environmental conditions at the Property.

6.0 SITE RECONNAISSANCE

6.1 METHODOLOGY AND LIMITING CONDITIONS

Mr. Richard Doherty and Ms. Lisa Raye of ECR visited the Property on October 9, 2012. Mr. David Moseley accompanied ECR for the site reconnaissance. A portion of the basement is currently leased to a tenant and could not be viewed. According to Mr. Moseley, the current southern Property line (i.e., the Property line after the recent sale of 1.2 acres that previously formed part of the Property) coincided with the edge of the lawn and the beginning of a wooded area. Therefore, the wooded area south of the lawn was not included in the site reconnaissance.

Viewing of the heating oil aboveground storage tank (AST) housed in a wooden enclosure attached to the east side of the dwelling was limited by the existence of the enclosure. The AST could only be viewed through a small access port as described further below.

6.2 GENERAL SITE SETTING

The Property includes a 3,982 square foot 2-story residence built in 1966, and an attached garage. A long paved driveway leads gradually upward from Bedford Road to the dwelling at the southern portion of the Property. Vegetated areas (primarily lawn) abut the driveway to the left and right, as shown on the Google Earth image on the title page of this report.

6.3 PROPERTY EXTERIOR

The Property exterior is comprised primarily of grassed areas. Wooded areas exist

along the stone walls that form the eastern and western Property lines. Landscaped areas exist just outside the dwelling. A circular area comprised of sandy soil with essentially no vegetation exists just southwest of the dwelling. According to Mr. Moseley, this was the former location of an aboveground swimming pool.

A paved driveway runs from Bedford Street to the dwelling. According to Mr. Moseley, the driveway was unpaved prior to 2004. Mr. Moseley stated that, years ago, oil had been applied to the driveway on several occasions (an estimated three times) to suppress dust.

A heating oil AST is housed in a wooden enclosure attached to the eastern portion of the dwelling. The AST was only partially visible through a small access port. ECR did not observe evidence of leakage via the access port; however, access to the tank was limited.

A 16' x 24' wooden barn, built in 1966, is located northwest of the dwelling. The barn has an earthen floor currently covered by sheets of plywood. A hole in the northern corner of the barn was reportedly caused by a burrowing animal. The barn is currently used for storage of a lawn mower, mower attachments, and various miscellaneous items. Storage of significant quantities of oil or hazardous materials was not noted. Mr. Moseley stated that the barn was originally used to house horses, and was later used for automobile storage. Mr. Moseley stated that the barn was not used for automobile maintenance or repair. He stated that two automobiles were stored outside the garage for a period of time.

A small 12' x 16' shed is located east of the dwelling. Small quantities of household chemicals (e.g., paints), tools, and miscellaneous items including a swimming pool pump were neatly stored in the shed.

A drain is located in the paved area just outside of the garage. Mr. Moseley stated that the drain feeds a dry well located on the Property south of the driveway. Evidence of spills or staining was not noted in the vicinity of the drain. A smaller drain is located outside the door leading to the rental unit. This door is located on the southern portion of the building. The drain appeared to be clogged and non-functional. The discharge point of the drain is unknown.

A pole-mounted transformer was noted on a utility pole on the Property (see Figure 2). Mr. Moseley stated that the transformer had been replaced at least once in the past. Based on the likely age of the transformer, it is unlikely to contain polychlorinated biphenyls (PCBs).

Areas of stressed vegetation were not noted during the site visit. Evidence of spills of oil or hazardous materials was not noted.

- **Recognized Environmental Conditions were not identified during the ESA.**

The conclusions expressed herein are subject to the Limitations and Exceptions noted in Section 1.3 of this report, and the Terms and Conditions referenced in the agreement between ECR and Mr. George Dimakarakos of Stamski & McNary, Inc.

8.0 DEVIATIONS

Deviations from the ASTM Standard (E1527-05) in performing this Phase 1 ESA include the following:

- A 50-year chain-of-title search was not performed.
- The potential presence of radon or asbestos was not assessed.

FIGURES

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